

Stinger Missile System Service Life Extension Program (SLEP)

DESCRIPTION

Stinger Missile platforms provide defense against high speed, close in, low altitude, fixed and rotary wing aircraft throughout the theater of operations. The Stinger Missile is a heat seeking air defense guided missile capable of man-portable, shoulder launch or vehicle launch via the Standard Vehicle Mounted Launcher. The Stinger Missile employs a



unique image scanning technique that allows it to discriminate among targets, flares, and background clutter. The Stinger Missile is also unique in that it possesses the Target Adaptive Guidance technique that biases missile orientation toward vulnerable portions of the aircraft and assures maximized lethality. This superior lethality is derived from hit-to-kill accuracy, high warhead lethality, and the impact force of the Stinger Missile's kinetic energy generated by speeds of up to Mach 2.0. The Stinger Missile is also highly deployable because it is a lightweight, self-contained air defense system that can be rapidly deployed in any combat situation. The Stinger Missile's fire-and-forget ability also increases the survivability of its crew. This fire-and-forget technology allows gunners and platforms to take cover or engage new targets immediately after firing. The Stinger Missile also has a low life cycle cost. The Stinger Missile is issued as a certified round of ammunition, so it requires no field maintenance or associated logistical costs. The upgrade (SLEP) consists of a new generation processor, software enhancement, a roll frequency sensor, and a lithium battery.

PROCUREMENT PROFILE:	FY00	FY01
<i>Quantity: Block I</i>	<i>0</i>	<i>356</i>
<i>SLEP</i>	<i>0</i>	<i>544</i>

OPERATIONAL IMPACT

The Stinger Missile is the only Air Defense Weapon in the forward area. It supports the maneuver style of warfare of the Marine Air Ground Task Force providing defense against high speed, close in, low altitude, fixed and rotary wing aircraft throughout the theater of operations. However, the magnitude of the threat has proliferated to the point that most developed countries have or are developing more advanced systems. The capabilities of the existing stockpile of Reprogrammable Micro Processor (RMP) needs to be increased to meet these threats by

modernization through technology insertion. The upgrade (to the Block I configuration) will eliminate several shortcomings of the RMP Missile that include shelf life concerns, capabilities against low-aspect angle targets, reactive infrared countermeasures, night engagements, and engaging targets in clutter. This upgrade has increased the acquisition range of the missile (out beyond 10 kilometers) and has been proven (has demonstrated) to be more effective against Unmanned Aerial Vehicles and low end Cruise Missiles.

PROGRAM STATUS

The Stinger Missile is a fully fielded missile. The Stinger Missile (SLEP) will start fielding in early FY01 and will be completed in late FY02.

DEVELOPER/MANUFACTURER

Raytheon Missile Systems Corporation